



**Utah Division of Air Quality
New Source Review Section**

**Form 14
Concrete Batch Plants**

Company _____

Site/Source _____

Date _____

| Process Information | | | | | | | | | | | | | |
|---|---|--------------------------|-----|----|-------------------------------------|--------------------------|--------------------------|---|--------------------------|--------------------------|---|--------------------------|--------------------------|
| <p>1. Type of batching:</p> <p><input type="checkbox"/> Wet (Rotary mixing trucks)</p> <p><input type="checkbox"/> Dry (Flat bed trucks with segregated material compartments)</p> <p><input type="checkbox"/> Central mix (Batching at plant site)</p> <p><input type="checkbox"/> Other (specify) _____</p> | <p>2. Raw materials that will be handled:</p> <p><input type="checkbox"/> coarse aggregate <input type="checkbox"/> portland cement washed</p> <p><input type="checkbox"/> fine aggregate <input type="checkbox"/> fly ash washed</p> <p><input type="checkbox"/> admixtures</p> <p><input type="checkbox"/> other (specify) _____</p> | | | | | | | | | | | | |
| <p>3. Maximum plant production rate and operating hours:</p> <p>_____ yd³/yr</p> <p>_____ yd³/hr</p> <p>_____ hrs/yr</p> <p>_____ hrs/day</p> | <p>4. Water sprays will be used at the following locations:</p> <table border="0"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> Stockpiles</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Aggregate bins</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Conveyor transfer points</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> | | Yes | No | <input type="checkbox"/> Stockpiles | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Aggregate bins | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Conveyor transfer points | <input type="checkbox"/> | <input type="checkbox"/> |
| | Yes | No | | | | | | | | | | | |
| <input type="checkbox"/> Stockpiles | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | |
| <input type="checkbox"/> Aggregate bins | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | |
| <input type="checkbox"/> Conveyor transfer points | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | |
| <p>5. Cement received by:</p> <p><input type="checkbox"/> Rail Car</p> <p><input type="checkbox"/> Truck</p> <p><input type="checkbox"/> Other (specify) _____</p> | <p>6. Portland cement is transferred from delivery vehicle to cement storage silo by (give maximum capacity in lb/hr):</p> <p><input type="checkbox"/> Pneumatic conveying system _____</p> <p><input type="checkbox"/> Elevator</p> <p><input type="checkbox"/> screw _____</p> <p><input type="checkbox"/> bucket _____</p> <p><input type="checkbox"/> Other (specify) _____</p> | | | | | | | | | | | | |
| <p>7. A baghouse is used on the cement silo vent:</p> <p><input type="checkbox"/> Yes (submit Form 10)</p> <p><input type="checkbox"/> No</p> | <p>8. Cement is transferred from cement storage silo to cement surge hopper by (maximum feed rate lb/hr):</p> <p><input type="checkbox"/> Pneumatic transfer system _____</p> <p><input type="checkbox"/> Gravity feed _____</p> <p><input type="checkbox"/> Screw Conveyor _____</p> <p><input type="checkbox"/> Bucket elevator _____</p> <p><input type="checkbox"/> Other (specify) _____</p> | | | | | | | | | | | | |

Form 14 - Concrete Batch Plants
(Continued)

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|--|--|
| <p>9. Cement weigh hopper is loaded by:</p> <p><input type="checkbox"/> Gravity feed</p> <p><input type="checkbox"/> Pneumatic conveyor</p> <p><input type="checkbox"/> Screw conveyor</p> <p><input type="checkbox"/> Other (specify) _____</p> | <p>10. The cement weigh hopper will be vented to the:</p> <p><input type="checkbox"/> Cement silo</p> <p><input type="checkbox"/> Baghouse (submit Form 10)</p> <p><input type="checkbox"/> Discharge spout</p> <p><input type="checkbox"/> Other _____</p> |
| <p>11. Aggregate received by:</p> <p><input type="checkbox"/> Rail car</p> <p><input type="checkbox"/> Truck</p> <p><input type="checkbox"/> Other (specify) _____</p> | <p>12. If aggregate storage bins are used, how is aggregate transferred to storage bin:</p> <p><input type="checkbox"/> Covered conveyor belt Length: _____</p> <p><input type="checkbox"/> Uncovered conveyor belt Length: _____</p> <p><input type="checkbox"/> Other: _____</p> |
| <p>13. Fly ash received by:</p> <p><input type="checkbox"/> Rail car</p> <p><input type="checkbox"/> Truck</p> <p><input type="checkbox"/> Other (specify) _____</p> | <p>14. Fly ash is transferred from deliver vehicle to storage (maximum capacity in lb/hr):</p> <p><input type="checkbox"/> Pneumatic conveying system _____</p> <p><input type="checkbox"/> Elevator</p> <p style="padding-left: 40px;"><input type="checkbox"/> screw _____</p> <p style="padding-left: 40px;"><input type="checkbox"/> bucket _____</p> |
| <p>15. Admixture ingredients:</p> | <p>16. Admixtures received by:</p> <p><input type="checkbox"/> Rail car</p> <p><input type="checkbox"/> Truck</p> <p><input type="checkbox"/> Other (specify) _____</p> |
| <p>17. Admixtures are stored in:</p> | <p>18. Admixtures are transferred from delivery vehicle to storage (maximum capacity in lb/hr):</p> <p><input type="checkbox"/> Pneumatic conveying system _____</p> <p><input type="checkbox"/> Elevator (screw) _____</p> <p style="padding-left: 40px;">(bucket) _____</p> <p><input type="checkbox"/> Other (specify) _____</p> |
| <p>19. The batch drop point to the truck or central mixer will be controlled to prevent dust emissions by:</p> <p><input type="checkbox"/> Shroud with exhaust air suction to baghouse (submit Form 10 also)</p> <p><input type="checkbox"/> Flexible discharge spout</p> <p><input type="checkbox"/> Other type of control device (explain in detail)</p> | |

Form 14 - Concrete Batch Plants
(Continued)

| 20. Equipment | | | | | |
|---|--------------------------------|------------------------------------|---|-----------------|---------------|
| Qty | Type | Specifications | | | |
| | Wet Batch Plants | Capacity _____ yd ³ /hr | Manufacturer | Model | Serial Number |
| | Central Mix Batch Plant | Capacity _____ yd ³ /hr | Manufacturer | Model | Serial Number |
| | Front End Loader | Usage _____ hr/day | Horsepower _____ | | |
| | Hoppers | Controlled by: | | | |
| | Aggregate Conveying System | Covered: _____ Length _____ ft | Uncovered: _____ Length _____ ft | | Other: |
| | Cement Conveying System | Pneumatic: _____ lb/hr | Screw _____ lb/hr Bucket _____ lb/hr | Other: | |
| | Elevators | Screw _____ lb/hr | Bucket: _____ lb/hr | Other: | |
| | Fly Ash Storage Silos | Volume _____ ft ³ | Controlled by: | Specifications: | |
| | Cement Storage Silos | Volume _____ ft ³ | Controlled by: | Specifications: | |
| | Other Storage Silos | Material: | Volume _____ ft ³ | Controlled by: | |
| | Coarse Aggregate Storage Piles | Size: _____ yd ³ | | | |
| | Fine Aggregate Storage Piles | Size: _____ yd ³ | | | |
| | Other Storage Piles | Material: | Size: _____ yd ³ | | |
| | Storage Bins | Material: | Size: _____ ft ³ | | |
| | Mixers | Volume: _____ yd ³ | | | |
| | Generators | Size: | Fuel: | Hrs/day: | Days/yr: |
| Emissions Calculations (PTE) | | | | | |
| <p>21. Calculated emissions for this device</p> <p>PM₁₀ _____ Lbs/hr _____ Tons/yr NO_x _____ Lbs/hr _____ Tons/yr</p> <p>SO_x _____ Lbs/hr _____ Tons/yr VOC _____ Lbs/hr _____ Tons/yr</p> <p>HAPs _____ Lbs/hr (speciate) _____ Tons/yr (speciate)</p> <p>Submit calculations as an appendix.</p> | | | | | |

Instructions Form 14 - Concrete Batch Plants

- NOTE: 1. **Submit this form in conjunction with Form 1 and Form 2.**
2. To relocate a concrete batch plant, which is already permitted submit Form 15b – Notice of Temporary Relocation of Portable Equipment.
3. Call the Division of Air Quality (DAQ) at **(801) 536-4000** if you have problems or questions in filling out this form. Ask to speak with a New Source Review engineer. We will be glad to help!

1. Mark the appropriate box for the kind of batching done at the facility.
2. Mark the appropriate box for kind of materials to be used.
3. Indicate the plant production rate and operating hours.
4. Indicate where water sprays will be used for emission controls.
5. How is the cement received?
6. How is the cement transferred from delivery vehicle to the silo. Indicate the maximum rate at which it can be unloaded.
7. Indicate whether or not a baghouse is used. If yes, also submit Form 10 with this application.
8. How is the cement transferred from the silo to the hopper and at what rate?
9. How is the cement weigh hopper loaded?
10. To where is the cement weigh hopper vented?
11. How is the aggregate received?
12. How is the aggregate transferred to storage bins?
13. How is fly ash received?
14. How is fly ash transferred to storage?
15. What admixture ingredients are used?
16. How are the admixture ingredients received?
17. How are the admixture ingredients stored?
18. How are admixtures transferred?
19. What is the control on the batch drop point to the truck or central mixer? If a baghouse is used, also submit Form 10.
20. Indicate the number and type of equipment that will be used in the facility. Give specifications on the individual pieces of equipment. Attach additional sheets of paper, if necessary.
21. Supply calculations for all criteria pollutants and HAPs. Use AP42 or Manufacturers data to complete your calculations.